

The Sine Law (2 formats) for $\triangle ABC$:

$$\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$$

or

$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

The Cosine Law (2 formats) for $\triangle ABC$:

$$a^2 = b^2 + c^2 - 2bc \cos A$$

or

$$\cos A = \frac{b^2 + c^2 - a^2}{2bc}$$

May 13-1:31 PM

The Sine Law only works when we have certain combinations of sides and angles.

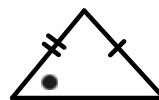
The Cosine Law provides different combinations that can be used to solve a triangle.

May 13-4:12 PM

L9 When to Use Sine Law or Cosine Law

Use the Sine Law given:

- two sides and an angle to find a second angle (SSA).

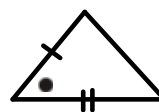


- two angles and a side to find a second side (SAA).

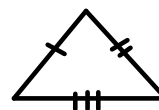


Use the Cosine Law given:

- two sides and the contained angle to find the third side (SAS).

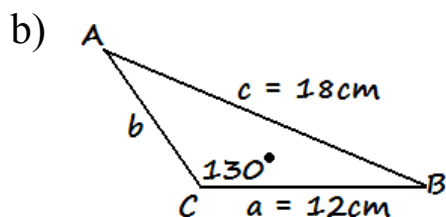
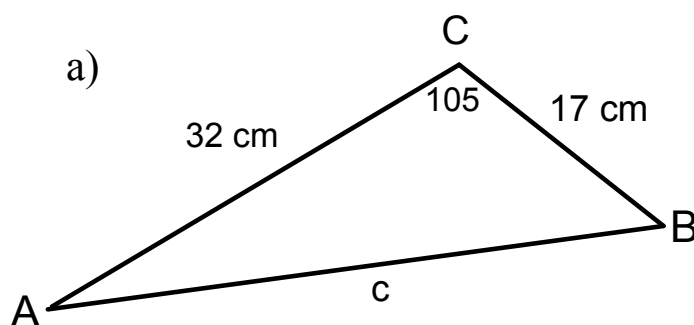


- three sides, and find any angle (SSS).



May 16 - 2:43 PM

Ex.1 Which law would you use to solve for the indicated angle or side in each of the following triangles?



May 13-4:11 PM

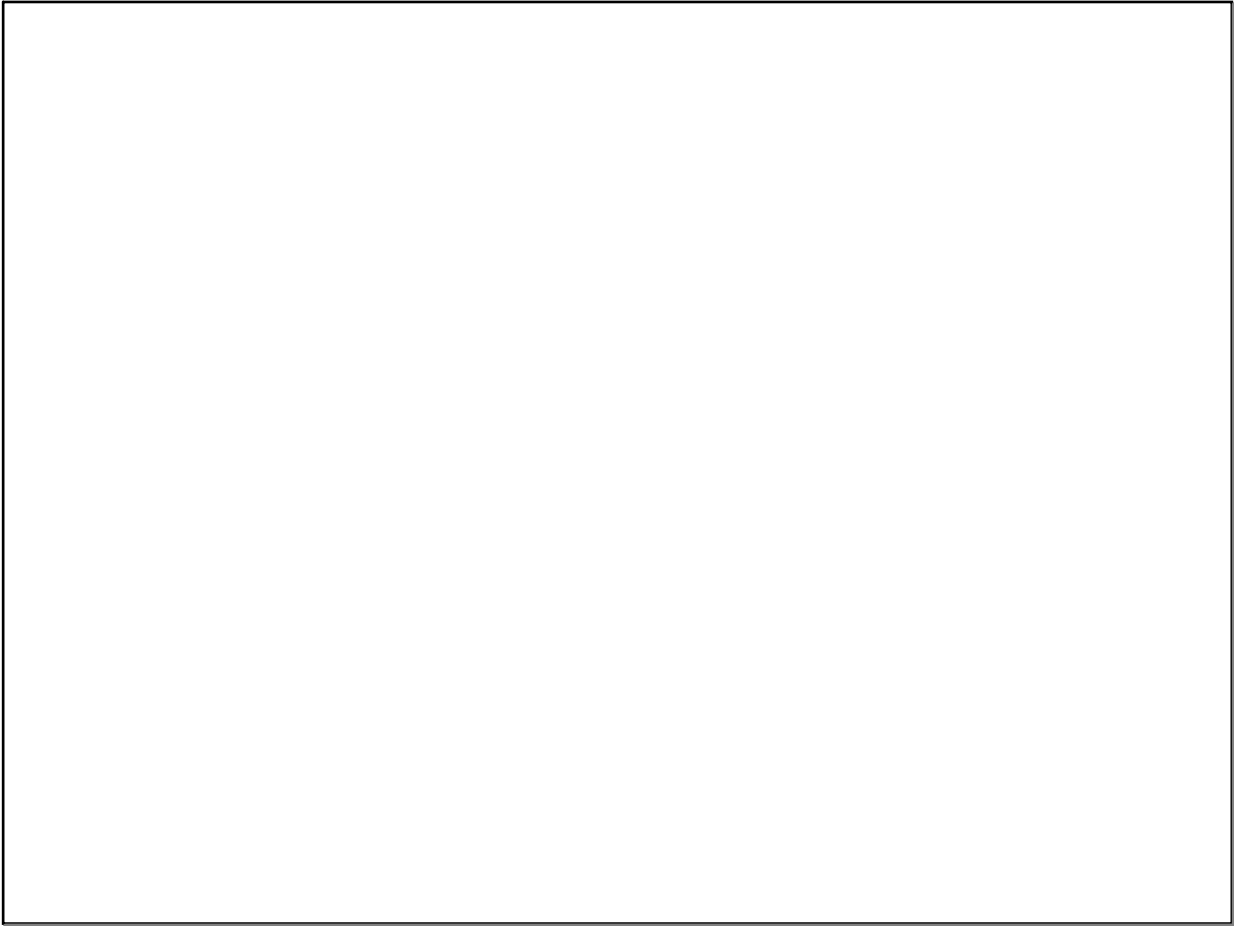
Ex.2 Draw a labelled triangle where the angle is solved for using the sine law.

May 13-4:19 PM

Assigned Work:

p. 449 #1, 2, 3
Worksheet

May 14 - 9:42 PM



Dec 2-9:02 AM